2

<u>Claims:</u>

Claims 1-24 are pending in the application. Claims 4, 8, 15, and 24 have been amended. Underlining indicates additions to a claim and strikeouts indicate deletions from a claim. With entry of these amendments, 1-24 will be pending.

1.(original)   A halftoning method, comprising:

adding a first value and a second value to form a sum;

placing a first colorant on the media if the sum exceeds a third value and either the second value exceeds the first value and the first value exceeds the third value or the first value equals or exceeds the second value and the third value equals or exceeds the second value; and

placing the second colorant on the media if the sum exceeds the third value and either the first value equals or exceeds the second value and the second value exceeds the third value or the second value exceeds the first value and the third value equals or exceeds the first value.

2.(original)   The halftoning method as recited in claim 1, further comprising:

subtracting a fourth value from the sum forming a difference; and

placing the first colorant and the second colorant on the media if the difference exceeds the third value.

3.(original)   The halftoning method as recited in claim 2, wherein:

placing the first colorant and the second colorant on the media includes comparing the difference to the third value.

4.(currently amended)The halftoning method as recited in claim 3, wherein:

placing the first colorant on the media includes comparing the third value to <u>the</u> sum, the second value to the first value, the first value to the third value, and the second value to the third value.

5.(original)   The halftoning method as recited in claim 4, wherein:

3

placing the second colorant on the media includes comparing the third value to the sum, the first value to the second value, the second value to the third value, and the third value to the first value.

6.(original) The halftoning method as recited in claim 5, wherein:

the first colorant includes cyan; and

the second colorant includes magenta.

7.(original) The halftoning method as recited in claim 6, wherein:

the first value includes a first color value corresponding to an intensity of the cyan; and

the second value includes a second color value corresponding to an intensity of the magenta.

8.(currently amended) The halftoning method as recited in claim 7, wherein:

placing the first colorant on the media includes placing the first colorant on a pixel ~~corresponding to the first color value~~;

placing the second colorant on the media includes placing the second colorant on the pixel ~~corresponding to the second color value~~; and

placing the first colorant and the second colorant on the media includes placing the first colorant and the second colorant on the pixel ~~corresponding to the first color value and the second color value~~.

9.(original) The halftoning method as recited in claim 8, wherein:

the third value includes a matrix threshold value corresponding to the pixel.

10.(original) The halftoning method as recited in claim 9, wherein:

the fourth value corresponds to a maximum possible value of the first color value and the second color value.

11.(original) A storage device, comprising:

a computer readable medium; and

S/N: 09/678,642
Case: 10003012-1
Amendment A

4

processor executable instructions stored on the computer readable medium, with the processor executable instructions configured to perform a halftoning process including adding a first value and a second value to form a sum, placing a first colorant on the media if the sum exceeds a third value and either the second value exceeds the first value and the first value exceeds the third value or the first value equals or exceeds the second value and the third value equals or exceeds the second value, and placing the second colorant on the media if the sum exceeds the third value and either the first value equals or exceeds the second value and the second value exceeds the third value or the second value exceeds the first value and the third value equals or exceeds the first value.

12.(original) The storage device as recited in claim 11, wherein:

the processor executable instructions further include subtracting a fourth value from the sum forming a difference and placing the first colorant and the second colorant on the media if the difference exceeds the third value.

13.(original) The storage device as recited in claim 12, wherein:

for the processor executable instructions, placing the first colorant and the second colorant on the media includes comparing the difference to the third value, placing the first colorant on the media includes comparing the third value to sum, the second value to the first value, the first value to the third value, and the second value to the third value, and placing the second colorant on the media includes comparing the third value to the sum, the first value to the second value, the second value to the third value, and the third value to the first value.

14.(original) The storage device as recited in claim 13, wherein:

the first colorant includes cyan;

the second colorant includes magenta;

the first value includes a first color value corresponding to an intensity of the cyan; and

the second value includes a second color value corresponding to an intensity of the magenta.

5

15.(currently amended) The storage device as recited in claim 14, wherein:

for the processor executable instructions, placing the first colorant on the media includes placing the first colorant on a pixel corresponding to the first color value, placing the second colorant on the media includes placing the second colorant on the pixel corresponding to the second color value, placing the first colorant and the second colorant on the media includes placing the first colorant and the second colorant on the pixel corresponding to the first color value and the second color value, the third value includes a matrix threshold value corresponding to the pixel, and the fourth value corresponds to a maximum possible value of the first color value and the second color value.

16.(original) A halftoning method, comprising:

adding a first value and a second value to form a sum;

placing a first colorant on the media if the sum exceeds a third value, a fourth value equals or exceeds the sum, and either the second value exceeds the first value and the first value exceeds the third value or the first value equals or exceeds the second value and the third value equals or exceeds the second value; and

placing the second colorant on the media if the sum exceeds the third value, a fourth value equals or exceeds the sum, and either the first value equals or exceeds the second value and the second value exceeds the third value or the second value exceeds the first value and the third value equals or exceeds the first value;

subtracting the fourth value from the sum forming a difference;

determining a smallest of the first value, the second value, and the difference exceeding the third value; and

placing either the first colorant and the second colorant, the first colorant, or the second colorant on the media, if respectively, the difference, the first value, or the second value corresponds to the smallest.

17.(original) The halftoning method as recited in claim 16, wherein:

the first colorant includes cyan;

the second colorant includes magenta;

the first value includes a first color value corresponding to an intensity of the cyan; and

S/N: 09/678,642
Case: 10003012-1
Amendment A

6

the second value includes a second color value corresponding to an intensity of the magenta.

18.(currently amended) The halftoning method as recited in claim 17, wherein:

placing the first colorant on the media includes placing the first colorant on a pixel ~~corresponding to the first color value~~;

placing the second colorant on the media includes placing the second colorant on the pixel ~~corresponding to the second color value~~;

placing the first colorant and the second colorant on the media includes placing the first colorant and the second colorant on the pixel ~~corresponding to the first color value and the second color value~~;

the third value includes a matrix threshold value corresponding to the pixel; and

the fourth value corresponds to a maximum possible value of the first color value and the second color value.

19.(original) A system to form an image on media, comprising:

a computer configured to perform a halftoning process including adding a first value and a second value to form a sum, generating data specifying placement of a first colorant on the media if the sum exceeds a third value and either the second value exceeds the first value and the first value exceeds the third value or the first value equals or exceeds the second value and the third value equals or exceeds the second value, and generating the data specifying placement of the second colorant on the media if the sum exceeds the third value and either the first value equals or exceeds the second value and the second value exceeds the third value or the second value exceeds the first value and the third value equals or exceeds the first value; and

an imaging device including an imaging mechanism and a controller coupled to the imaging mechanism and configured to place the first colorant or the second colorant on the media according to the data.

20.(original) The system as recited in claim 19, wherein:

7

the computer includes a configuration to subtract a fourth value from the sum forming a difference and generate the data specifying placement of the first colorant and the second colorant on the media if the difference exceeds the third value.

21.(currently amended) The system as recited in claim 20, wherein:

the first colorant includes cyan;

the second colorant includes magenta;

the first value includes a first color value corresponding to an intensity of the cyan;

the second value includes a second color value corresponding to an intensity of the magenta;

the imaging device includes a configuration to place, according to the data, the first colorant on a pixel ~~corresponding to the first color value~~, the second colorant on the pixel ~~corresponding to the second color value~~, and the first colorant and the second colorant on the pixel ~~corresponding to the first color value and the second color value~~;

the third value includes a matrix threshold value corresponding to the pixel; and

the fourth value corresponds to a maximum possible value of the first color value and the second color value.

22.(original) An imaging device, comprising:

a controller configured to perform a halftoning process including adding a first value and a second value to form a sum, generating data specifying placement of a first colorant on the media if the sum exceeds a third value and either the second value exceeds the first value and the first value exceeds the third value or the first value equals or exceeds the second value and the third value equals or exceeds the second value, and generating the data specifying placement of the second colorant on the media if the sum exceeds the third value and either the first value equals or exceeds the second value and the second value exceeds the third value or the second value exceeds the first value and the third value equals or exceeds the first value; and

an imaging mechanism configured to place the first colorant or the second colorant on the media according to the data.

S/N: 09/678,642
Case: 10003012-1
Amendment A

8

23.(original) The imaging device as recited in claim 22, wherein:

the controller includes a configuration to subtract a fourth value from the sum forming a difference and generate the data specifying placement of the first colorant and the second colorant on the media if the difference exceeds the third value.

24.(currently amended) The imaging device as recited in claim 23, wherein:

the first colorant includes cyan;

the second colorant includes magenta;

the first value includes a first color value corresponding to an intensity of the cyan;

the second value includes a second color value corresponding to an intensity of the magenta;

the imaging mechanism includes a configuration to place, according to the data, the first colorant on a pixel corresponding to the first color value, the second colorant on the pixel corresponding to the second color value, and the first colorant and the second colorant on the pixel corresponding to the first color value and the second color value;

the third value includes a matrix threshold value corresponding to the pixel; and

the fourth value corresponds to a maximum possible value of the first color value and the second color value.

S/N: 09/678,642
Case: 10003012-1
Amendment A